



COMDTINST M12550.11
7 MAR 1984

COMMANDANT INSTRUCTION M12550.11

Subj: Pay for Irregular or Intermittent Duty Involving Physical Hardship or Hazard

1. REFERENCES.

- a. Sections 5545 (d) and 5548 (d) of title 5, U.S. Code
- b. FPM Supplement 990-1, Subpart I
- c. FPM Supplement 990-2, Book 550, Subchapter S9

2. PURPOSE. This Instruction provides information and instructions for the payment of differentials for irregular or intermittent duty involving unusual physical hardship or hazard to General Schedule (GS) employees.

3. DEFINITIONS.

- a. Duty involving physical hardship means a duty which may not itself be hazardous but which causes extreme physical discomfort or distress and which is not adequately alleviated by protective or mechanical devices, such as duty requiring exposure to extreme temperature for a long period of time; a duty involving arduous physical exertion, such as a duty which must be performed in cramped conditions; a duty involving exposure to fumes, dust, or noise, which causes nausea, skin, eye, ear, or nose irritation.
- b. Hazardous duty means a duty performed under circumstances in which an accident could result in serious injury or death, such as a duty performed on a high structure where protective facilities are not used, or on an open structure where adverse conditions such as darkness, lightning, sleet or snow, steady rain, or high wind velocity exists.

4. BACKGROUND.

- a. One objective of the Coast Guard's Occupational Health and Safety Program is to provide for the safety and health of its civilian personnel by elimination or reduction to the lowest possible level all physical hardships or hazards. Guidelines for carrying out this responsibility are contained in the Coast Guard Safety and Occupational Health Manual (COMDTINST M5100.29), Technical Guide: Practices for Respiratory Protection [COMDTINST 6260.2 (series)], Occupational Safety and Health Standards for Abrasive Blasting and Painting Operations [COMDTINST 6260.7A (series)], Asbestos Exposure Control [COMDTINST 6260.10 (series)], Chromate Paints; Potential Health Hazards of [COMDTINST 6260..13 (series)], and many other Coast Guard publication such as the Naval Engineering Manual (COMDTINST M9000.6).
- b. When efforts to comply with published guidelines do not overcome the physical hardship or hazard, and these factors have not been considered in the classification of the job, a hazard pay differential is warranted. However, although a hazard pay differential is warranted, the Coast Guard has a responsibility to initiate continuing positive action to eliminate danger and risk which contribute to or cause the physical hardship or hazard. The existence of such a pay differential is not intended to condone work practices which circumvent Federal safety laws, rules, regulations, and procedures.
- c. Regulations required by reference (a) on payment of a hazard pay differential for exposure to a physical hardship or hazardous condition for GS employees are contained in references (b) and (c).

5. POLICY.

- a. A schedule of approved categories of physical hardships or hazards, and the period during which they are payable is set out in Chapter 1 of this Instruction.
- b. When an activity has previously compensated covered employees for a category included in Chapter 1, continued compensation is authorized.
- c. When an activity encounters a category included in Chapter 1 for which their employees have not been previously compensated, before a differential may be paid, prior clearance must be obtained from the Commandant (G-PC). Such requests must include the same information as described in paragraph d. below.
- d. Amendments to Chapter 1 may be made when the Office of Personnel Management (OPM) changes the schedule. Coast Guard activities may request additions to the schedule by submitting a request to the Commandant (G-PC). Requests shall include (1) the nature of the duty, (2) the degree to which the employee is exposed to the hazard or physical

(cont'd) hardship, (3) the length of time during which the duty will continue to exist, and (4) the degree to which control may be exercised over the physical hardship or hazard, and may recommend the rate of hazard pay differential to be established.

- e. Upon receipt of a request for an addition to the schedule, Commandant (G-PC) will review the request, coordinate with Commandant (G-CSP), the requesting activity, and the concerned labor unit. If the request is considered appropriate, Commandant (G-PC) will forward the request to OPM through the Department of Transportation. If approved by OPM the new category will be added to Chapter 1.

6. AUTHORIZATION OF HAZARD PAY DIFFERENTIAL.

- a. The Coast Guard shall pay the approved hazard pay differential listed in Chapter 1 to an employee who is assigned to the performs any irregular or intermittent duty specified when the duty is not usually involved in carrying out the duties of his or her position. Hazard pay differential may not be paid an employee when the hazardous duty has been taken into account in the classification of the position.
- b. For the purpose of this section:
 - (1) "Not usually involved in carrying out the duties of the position" means that even though the hazardous duty may be embraced within the position description it is not performed with sufficient regularity to constitute an element used in establishing the grade of the position.
 - (2) "Has been taken into account in the classification of the position" means that the duty constitutes an element used in establishing the grade of the position.
- c. OPM has concluded that when there is a dispute involved as to whether a certain duty has been considered in the classification of the position and/or given sufficient weight, that these matters may be raised as an individual or group classification appeal (see 3 FLRA No.67, June 25, 1980).
- d. If the use of the procedure shown in paragraph 6c above should result in a finding that the duties are not properly considered in the classification process, there would be no bar in law or regulation to negotiation on the application of OPM's schedule of pay differentials to such duties.

7. PAYMENT OF HAZARD PAY DIFFERENTIAL. When an employee performs duty for which hazard pay differential is authorized, he or she shall be paid the hazard pay differential for the hours in a pay status on the day during which the hazard is performed. For purpose of this paragraph hours in a pay status for work performed during a continuous period extending over two days shall be considered to have been performed on the day on which the work began and any allowable differential shall be charged to that day.

Method of Computing Hazard Pay.

	Mon.	Tues.	Wed.	Thurs.	Fri.	Total
Regular-----	8 a.m.	8 a.m.	8 a.m.	8 a.m.	8 a.m.	40
Tour	5 p.m.	5 p.m.	5 p.m.	5 p.m.	5 p.m.	
Irregular-----	5 p.m.	11 p.m.	12:01 a.m.	11 p.m.	12:01	10
Tour	7 p.m.	12 p.m.	3 a.m.	12 p.m.	3 a.m.	
Hazardous-----	3 p.m.	11 p.m.			1 a.m.	3
Duty	4 p.m.	12 p.m.	-----	-----	2 a.m.	
Payable	10	12	0	12	0	34

On Monday the employee's hazardous duty will be computed on the basis of 10 hours, the total number of hours worked that day. On Tuesday the employee's hazardous duty will be computed on the basis of 12 hours because, for hazard pay purposes, the period of overtime which extended over two days is charged to the day on which the overtime began.

On Wednesday the employee performed no hazardous duty. On Thursday the employee's hazardous duty will again be computed on the basis of 12 hours, because, although the hazardous duty actually occurred on Friday, a continuous period of work which extends over two days is charged to the day on which the work began.

On Friday the employee is not considered to have performed any hazardous duty.

Thus for the week, the employee will be paid 40 hours at straight time rates, 10 hours at overtime rates, and 34 hours hazard pay differential. If, for example, the employee's basic rate of pay is \$8 per hour and hazard pay differential is 25 percent, the total would be $(\$8 \times 40) + (\$12 \times 10) + (\$2 \times 34) = \508

Note: Hazard pay is computed on the basis of hours in a pay status. If, in an 8-hour workday, the employee performs hazardous duty for one hour and is in a paid leave status for seven hours, his or her hazard pay will be computed on the basis of the eight hours. On the other hand, if he or she was in a nonpaid leave status for seven hours, his or her hazard pay would be computed on the basis of one hour.

8. RELATIONSHIP TO ADDITIONAL COMPENSATION PAYABLE UNDER OTHER STATUTES.

Hazard pay differential is in addition to any additional pay or allowances payable under other statutes. It shall not be considered part of the employee's rate of basic pay in computing additional pay or allowances payable under other statutes.

9. ACTION. District commanders and commanding officers of Headquarters units shall compensate GS employees when circumstances of individual cases meet the requirements of this Instruction for hazard differential pay.

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CHAPTER 1 - SCHEDULE OF PAY DIFFERENTIALS AUTHORIZED FOR IRREGULAR OR INTERMITTENT HAZARDOUS DUTY

A. Irregular or intermittent duty.

1. Exposure to hazardous weather or terrain:

- a. Work in rough and remote terrain. When working on cliffs, narrow ledges, or near vertical mountainous slopes where a loss of footing would result in serious injury or death, or when working in areas where there is danger of rock falls or avalanches.
- b. Traveling under hazardous conditions.
 - (1) When travel over secondary or unimproved roads to isolated mountain top installations is required at night, or under adverse weather conditions (such as snow, rain, or fog) which limits visibility to less than 100 feet, when there is danger of rock, mud, or snow slides.
 - (2) When travel in the wintertime, either on foot or by means of vehicle, over secondary or unimproved roads or snow trails, in sparsely settled or isolated areas to isolated installations is required, when there is danger of avalanches, or during "whiteout" phenomenon which limits visibility to less than 10 feet.
 - (3) When work or travel in sparsely settled or isolated areas results in exposure to temperatures and/or wind velocity shown to be of considerable danger, or very great danger, on the windhill chart (Figure 1-1), and shelter (other than temporary shelter) or assistance is not readily available.

c. Snow or ice removal operations.

When participating in snowplowing or snow or ice removal operations, regardless of whether primary, secondary or other class of roads, when (1) there is danger of avalanche, or

- (2) there is danger of missing the road and falling down steep mountainous slopes because of lack of snow stakes, "whiteout" conditions, or sloping ice-pack covering the snow.

d. Water search and rescue operations.

Participating as a member of a water search and rescue team in adverse weather conditions when winds are blowing 35 m.p.h. (classified as gale winds) or in water search and rescue operations conducted at night.

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e. Travel on Lake Pontchartrain.

- (1) When embarking, disembarking or traveling in small craft (boat) on Lake Pontchartrain when wind direction is from north, northeast or northwest, and wind velocity is over 15 knots; or
- (2) When traveling in small craft, where craft is not radar equipped, on Lake Pontchartrain is necessary due to emergency or unavoidable conditions and the trip is made in a dense fog under fog run procedures.

f. Hazardous boarding or leaving of vessels.

When duties (1), (2), or (3) are performed under adverse conditions of foul weather, or ice, or night, and when the sea is high (3) feet and above):

- (1) Boarding or leaving vessels at sea or standing offshore during lightering or personnel transfer operations.
- (2) Boarding or leaving or transferring equipment between small boats or rafts and steep, rocky or coral surrounded shoreline.
- (3) Transferring equipment between a small boat and rudimentary dock by improvised or temporary facility such as an unfastened plank leading from boat to dock.

- g. Conducting craft tests to determine seakeeping characteristics of small craft in a seaway when U.S. Storm Warnings normally indicate unsafe seas for a particular size craft.
- h. Working on a drifting sea ice floe. When the job requires that the work be performed out on sea ice, e.g., installing scientific instruments and making observations for research purposes.

Differential Rate: 25%

2. Exposure to physiological hazards:

a. Working in pressurized sonar domes.

Performing checkout of sonar system after sonar dome has been pressurized. This may include such duties as changing transducer elements, setting of transducer turntables, checking of cables, piping, valves, circuits, underwater telephone, and pressurization plugs.

Differential Rate: 8%

- b. Working in nonpressurized sonar domes that are a part of an underwater system. Performing certification pretrial inspections, involving such duties as calibrating, adjusting, and photographing equipment, in limited space and with limited egress.

Differential Rate: 4%

3. Exposure to hazardous agents, work with or in close proximity to:

- a. Explosive or incendiary materials. Explosive or incendiary materials which are unstable and highly sensitive.
- b. At-sea shock and vibration tests. Arming explosive charges and/or working with, or in close proximity to, explosive armed changes in connection with at-sea shock and vibration tests of naval vessels, machinery, equipment, and supplies.
- c. Toxic chemical materials. Toxic chemical materials where there is a possibility of leakage or spillage.
- d. Fire retardant materials tests.

Conducting tests of fire retardant materials when the tests are performed in ventilation restricted room where the atmosphere is continuously contaminated by obnoxious odors and smoke which causes irritation to eyes and respiratory tract.

Differential Rate: 25%

4. Work in fuel storage tanks:

When inspecting, cleaning or repairing fuel storage tanks where there is no ready access to an exit, under conditions requiring a breathing apparatus because all or part of the oxygen in the atmosphere has been displaced by toxic vapors or gas, and failure of the breathing apparatus would result in serious injury or death with the time required to leave the tank.

Differential Rate: 25%

5. Firefighting:

- a. Forest and range fires.

Participating as a member of a firefighting crew in fighting forest and range fires on the fireline.

b. Equipment, installation, or building fires.

Participating, as an emergency member of a firefighting crew, in fighting fires of equipment, installations, or buildings.

c. In-water under-pier firefighting operations.

Participating in-water under-pier firefighting operations (involving hazards beyond those normally encountered in firefighting on land, e.g., strong currents, cold water temperatures, etc.).

Differential Rate: 25%

6. Work in open trenches:

Work in an open trench 15 feet or more deep until proper shoring has been installed.

7. Underground work:

Work underground performed in the construction of tunnels and shafts, and the inspection of such underground construction, until the necessary lining of the shaft or tunnel has eliminated the hazard.

Differential Rate: 25%

8. Underwater duty: Diving. Diving, including SCUBA (Self-Contained Underwater Breathing Apparatus) diving, required in scientific and engineering pursuits, or search and rescue operations, when:

- a. At depth of 20 feet or more below the surface; or
- b. Visibility is restricted; or
- c. In rapidly flowing or cold water; or
- d. Vertical access to the surface is restricted by ice, rock, or other structure.

Differential Rate: 25%

9. Sea duty aboard deep research vessels:

Participating in sea duty wherein the team member is engaged in handling equipment on or over the side of the vessel when the sea-state is high (12-knot winds and 3-foot waves) and the work is done on deck in relatively unprotected areas.

Differential Rate: 25%

10. High work:

Working on any structure of at least 50 feet above base level, ground, deck or roof, etc., under open conditions, if the structure is unstable or if scaffolding guards or other suitable protective facilities are not used, or is performed under adverse conditions such as snow, sleet, ice on walking surfaces, darkness, lightning, steady rain, or high wind velocity.

Differential Rate: 25%

11. Flying, participating in:

- a. Test flights of new, modified, or repaired aircraft. Test flights of new or repaired aircraft or modified aircraft when the modification may affect the flight characteristics of the aircraft.
- b. Landing and taking-off in polar areas. Landing in polar areas on unprepared snow or ice surfaces and/or taking off under the same conditions.

Differential Rate: 25%

12. Ground work beneath hovering helicopter:

Participating in ground operations to attach external load to helicopter hovering just overhead.

Differential Rate: 25%

13. Sling-suspended transfers:

When performance of duties requires transfer from a helicopter to a ship via a sling on the end of steel cable or from a ship to another ship via chair harness hanging from a high-line between the ships when both vessels are underway.

Differential Rate: 25%

14. Cargo handling during lightering operations:

Off-loading of cargo and supplies from surface ships to landing Craft-Medium (LCM) boats involving exposure not only to falling cargo but such other hazards as shifting cargo with the LCM, swinging cargo hooks, and possibility of falling between the LCM and cargo vessel.

15. Hot work:

Working in confined spaces wherein the employee is subject to temperatures in excess of 110 degrees Fahrenheit.

Differential Rate: 4%

16. Work in unsafe structures:

Working within or immediately adjacent to a building or structure which has been severely damaged by earthquake, fire, tornado, flood, or similar cause, when the structure has been declared unsafe by competent technical authority, and when such work is considered necessary for the safety of personnel or recovery of valuable materials or equipment, and the work is authorized by competent authority.

Differential Rate: 25%

WINDCHILL CHART

CHAPTER 2 - BACKGROUND INFORMATION

- A. The material in this Chapter is intended to serve as an aid to agencies in determining what situations a hazardous duty described in Chapter 1 covers. This material reflects some of the facts the OPM considered in making its determination to authorize a hazard differential, and we hope that it will serve better to identify the nature of the hazard the differential is intended to compensate.

1. Exposure to hazardous weather or terrain.

a. Work in rough and remote terrain.

Removing injured people from remote and inaccessible spots at high altitudes, often in conditions of high wind, extreme cold, limited visibility, and with sheer drops of thousands of feet, is typical of the unusual risks contemplated.

b. Traveling under hazardous conditions.

These unusual hazards arise from the need to maintain and supply isolated installations. Because of the urgency of the situation, control over the hazard is reduced.

c. Snow or ice removal operations.

Dangers of avalanche or of missing the road are likely to occur at almost any time between December and May in our mountainous Western parks; when the conditions described persist, the degree of exposure is 100 percent. The danger of avalanche is always increased during snow removal operations by virtue of the sound waves from the noise created by the snowplow or bulldozer itself setting off the avalanche. Snow stakes may be missing or entirely covered by the snow. The snowplow operator must also contend with the white-out phenomenon and must rely solely on his or her vision to keep him or her oriented to his or her surroundings. Sometimes, the ice fields which form on the road can build to heights of 10 to 20 feet and can be described as a sloping skating rink.

d. Water search and rescue operations.

High winds or lack of visibility increases the danger of swamping or collision when working close to a distressed craft. The length of exposure could be up to several hours on any occasion and missions occur a dozen or more times annually at most of our water-oriented recreation areas.

e. Travel on Lake Pontchartrain.

A VORTAC (i.e., a very high frequency omnidirectional range and tactical air navigation aid, located in a single building) facility serves as an en route navigational aid and as a critical approach aid to both Moisant and Lake Front Airports, which are located near New Orleans. An outage of the facility may result in traffic delays at either airport as well as rerouting other traffic.

(1) Lake Pontchartrain is a shallow water lake, with an average depth of 15 feet. This lake is considered treacherous by the Coast Guard and other persons affiliated with inland water navigation and, in fact, is considered one of the most treacherous bodies of water in the United States. Wave action, stirred up by the winds, does not come from one direction only, but from several directions at once. When winds on Lake Pontchartrain reach 15 knots or higher from the north, northeast, or northwest, travel by small craft (Coast Guard regulations define small craft as 60 feet and under) to and from the New Orleans (Moisant VORTAC) facility becomes arduous.

(2) Boat is seaworthy

(a) Travel to the facility is made in a 38-foot crew boat, which is capable of withstanding all types of seas occurring on Lake Pontchartrain. However, travel to and from the VORTAC facility must be made by passing under the Lake Pontchartrain Causeway (bridge). During periods of calm seas, the boat can pass under the causeway located three miles from the south shore. This is necessary so that the top of the boat will not strike the causeway when riding upon a wave. Passing under the hump is hazardous because the winds tend to drive the boat in one direction and the wave action tends to drive the boat in another. Travel is naturally more hazardous when conducted at night or in fog.

(b) Upon reaching the facility, a technician must disembark onto a landing dock. There are two ways to disembark from the boat. One is by grabbing a handline that is hung from a pipe structure and stepping from the boat to the landing dock. The other method is by means of a hoist that is electronically controlled by radio.

(3) Maneuvering becomes difficult.

(a) During rough seas the landing dock is always wet and slippery. With a north wind the handline is blown toward the boat, thereby reducing the distance the technician must reach for the handline. Maneuvering the boat under these conditions becomes quite difficult.

(cont'd) When the sea is too rough for the boat to get close enough to the dock for the employees to disembark, the hoist is used. It is lowered and maneuvered over the boat so that the technician can swing into the seat when the bow of the boat crests at its highest point. Once the technician is on the seat the boat must immediately back out and the seat must be raised so that the boat cannot crest and strike the technician.

- (b) Operation of the boat to the VORTAC in Lake Ponchartrain is performed under the conditions described above approximately 15 times per year. A few of these trips are unintentional, when the weather condition occurs without warning while the boat is enroute. Generally, there are two or three persons on the boat during each of these trips.
- (c) The decision to make the trip or to attempt to transfer to the VORTAC rests with the employee and his or her supervisor. However, these employees are not expected to make no-go decisions except under conditions so hazardous that injury or loss would be probable. This is the only control which can be exercised over the hazard.

f. Hazardous boarding or leaving of vessels.

- (1) Fisheries Management Agents, while on patrol duty aboard U.S. Coast Guard Cutters or Bureau vessels, are called on to make boarding of ships involved in fisheries off the shore of the United States. These boardings usually involve being lowered in a small boat from the patrol ship and catching and climbing a Jacob's ladder from the small boat to the vessel being visited. Under adverse sea conditions, i.e., seas over 3 feet in height, there is considerable danger in making such transfers due to erratic and rapid change in relative motion between the small boat and ship with frequent collisions of the vessels. In freezing weather, the prospect of ice on the boat and boarding ladder greatly increase the risk involved.
- (2) FDA inspectors from the Seattle District are required to conduct inspections of seafood canneries and processors located throughout Alaska. As some of the canneries are mobile and are located in remote areas, it is necessary at times for inspectors to travel on small fishing vessels as no other means of transportation is available. On such occasions when the wind is high, the inspectors are exposed to considerable hazard. They must carry large quantities of dry ice and other gear. At times they must load this equipment onto the boats at docks where no facilities exist other than an unfastened plank leading from the dock to the boat. During periods of rain and high wind they must exercise care and skill to avoid falling into the water, the temperature of which is sometimes only a few degrees above freezing.

(cont'd) Transferring the heavy gear from the small boats to the larger floating canneries is even more hazardous as the inspectors, should they fall into the water, are exposed to the danger of being crushed between the two vessels or being unable to surface.

2. Exposure to hazardous agents (Working with or in close proximity to):

a. Explosive or incendiary materials.

- (1) This duty includes assembling, testing or cleaning explosive ordnance such as fuses, primers, detonators, auxiliary detonators, cartridges, projectiles, gun ammunition, and the like. Also, conducting tests to evaluate the ballistic properties of explosive materials.
- (2) Where employees have knowledge and experience concerning ordnance and ordnance functioning, and work with known ordnance has been taken into account in classifying the employee's position, no hazard differential is payable for work with known ordnance. However, work with unknown explosive ordnance is still unusually hazardous for these employees and hazard differential is payable to them. There are definite hazards when explosive ordnance is manually manipulated, or when new unevaluated, mechanical, or explosive techniques are applied to explosive ordnance which is then approached or handled for examination and evaluation. The sensitivity or stability, or both, of those items, or components of those items, have been altered to an unknown degree. Though normal safety precautions are taken, the hazards cannot be eliminated.

b. At-sea shock and vibration tests.

- (1) This duty requires arming explosive charges or working with, or in close proximity to (or both), explosive armed charges in at-sea shock and vibration tests of naval vessels, machinery, equipment, ment, and supplies, charges are armed on shore at water's edge according to a detailed time schedule. Tests of this type are done about once a week. Sixty pound charges are used for these tests. The charge is armed in a discarded 5-inch gun mount which has grated metal doors in the water side and has a thin sheet metal 3-sided structure within it.
- (2) From the time the bomb is assembled to the time it is carried out of the barge and positioned, by a crane, underwater for shielding, there is a danger of explosion. The bomb is towed to position about 200 feet off-shore. The equipment, machinery, or supplies to be tested are properly secured in a metal barge which is towed to position off-shore.

(cont'd) After the test barge is in position and bomb is towed within 20 feet of the barge, an engineer/technician goes out to the barge to check the equipment just before the actual test. At this time, there is a hazard of explosion of the bomb. For shock tests of ships at sea, bombs are 1,200; 10,000; or 40,000 pounds. The bombs are armed with the assistance of engineers/technicians on a tug at sea. All persons on the tug are in danger of loss of life should the bomb accidentally explode. Tests like these are done two or three times a year. The bomb is positioned to shock test a complete ship.

c. Toxic chemical materials.

Examples of work involving exposure to toxic chemical materials include:

- (1) Preparing toxic chemical test solution for aerosol and vapor dispersion.
- (2) Operating various types of chemical engineering equipment in a restricted area, such as reactors, filters, stripping units, fractioning columns, blenders, mixers, or pumps, utilized in the development, manufacturing, and processing of toxic and experimental chemical warfare agents and the impregnating of chemicals.
- (3) Handling or working with toxic chemical agents such as mustard, nerve, phosgene, or chlorine.

d. Fire retardant materials tests.

This duty is performed by personnel conducting tests in a draft-free, ventilation-restricted, confined room, largely saturated with smoke-filled air. It is necessary to work in a room with these specifications in order to perform the tests properly. Prolonged exposure can result in chronic conjunctivitis and inhalation of the fumes may result in increased respiratory ailments.

3. Work in fuel storage tanks:

The fuel tanks are underground and access is achieved by means of a vertical ladder. A breathing apparatus is required because the oxygen in the atmosphere has been displaced by toxic vapors. If the breathing apparatus should fail, and a person had to inhale the air in these tanks, he or she would become unconscious in a few breaths, either from the oxygen deficiency or the toxic vapors. Within the time required to get him or her up the ladder, and out through the manhole, the employee might suffer serious injury or or death from lack of oxygen or from inhaling the toxic fumes.

4. Firefighting:

a. Forest and range fires.

While all employees of the Forest Service are subject to being placed on the fire line, except for those in the Fire Suppression series, fighting forest fires is actually an irregular and intermittent duty; it is not taken into account in grading their positions and is not usually involved in carrying out the general duties of the positions. Fighting forest fires is hazardous without question. The work is usually done in precipitous mountain terrain, where there is almost continuous danger from falling rocks or falling trees. Often the work is at night because fires are usually less active at that time and it is advantageous to concentrate on fire suppression then, or in the early morning. It is not possible to predict just what a fire is going to do at all times. Winds in canyons and on side slopes often change directions almost instantaneously. A gentle breeze at one time may become almost a hurricane a few minutes later. Fires that appear docile and almost out may in a very short time become a roaring inferno.

b. Equipment, installation, or building fires.

No distinction is made between Government and non-Government owners in the description of this hazardous duty. The degree of hazard to an employee is not affected by who owns the structure, installation, or building.

c. In-water under-pier firefighting operations.

- (1) Participating in in-water under-pier firefighting on land (strong currents, cold water temperature, etc.). This duty involves in-water operation of a floating monitor equipped with a firehose nozzle to which is attached a firehose from either a tugboat or nearby vehicle.
- (2) The in-water firefighting operation exposes the employee not only to the hazards of temperature and tidal conditions but also the hazards from falling timbers breaking loose from under piers, from exposure to heat and smoke, and from exposed (burned out) electrical wire which, in the environment of water, creates a possibility of serious exposure to electrical shock.

5. Work in open trenches.

This duty is hazardous because of danger of the side of a trench caving in and burying the men who are digging it.

6. Underground work.

Underground work associated with the construction of tunnels and shaft is considerably more hazardous than ordinary construction. An indication of the hazard is that most labor agreements between the construction trades and contractor associations include a wage differential for crafts working underground. There are hazards involved in underground excavation which cannot be eliminated nor substantially reduced by the application of safety measures. These include the presence from time to time of explosives, fallouts, and cave-ins, confined working areas and limited escape routes, and unanticipated excessive dust or other atmospheric contaminations including methane gas and deficiency or failure in the fresh air supply with resulting carbon monoxide buildup. Hazards such as these would appear to extend to those inspecting the work as well as those engaged in the actual construction.

7. Underwater duty - Diving.

- a. The principal kind of diving required in scientific and engineering pursuits is diving by a team of professional engineers and technicians for the underwater inspection of Government-owned or operated physical facilities, or both. The purpose of these inspections will be to determine the condition of under water structures and recommend maintenance and repair requirements or replacement. Structures would include dam spillage trashracks, gates, stilling basins, tailrace areas, outlet work, aprons, ground mats, canals, bridges, pipes, checks, turnouts, fish protection and collection facilities, pumping plants, and other submerged structures.
- b. Participating in SCUBA diving missions is hazardous. Even with the limited protection afforded by wet suits, exposure to cold water has been found to restrict breathing ability (check muscle and diaphragm movement) initially so that an acclimation period of a few minutes is required to adjust and function normally. Prolonged exposure to the cold water increases exhaustion, causes numbness, and limits ability to move quickly or put forth physical effort. Fighting strong tidal currents requires heavy exertion on the part of the diver, and the possibility of a muscle cramp, increased by the cold temperature, could result in a diver's being carried some distance from his or her "buddies" underwater by the tidal currents.

8. High work:

This duty includes work performed at a height of 50 feet or more on structures such as radio, radar, television, powerline or watertowers, steeples, or smokestacks, or treetops, when the work is performed under hazardous conditions caused by the absence of scaffolding, guards, or other suitable protective measures or facilities.

9. Flying, participating in:

a. Test flights of new, modified, or repaired aircraft.

This duty involves participation in test flights of aircraft during their developmental period or after modification. These flights involve the need to operate equipment deliberately beyond its known design capabilities or safe operating limits.

b. Landing and taking off in Polar Areas.

Uneven surfaces, adverse weather, and whiteout conditions make landings and take-offs by ski-equipped aircraft hazardous.

10. Ground work beneath hovering helicopter:

When participating in ground operations to attach external loads to helicopters hovering just overhead, i.e., at arm-length height, the ground position is hazardous because of the possibility of being crushed or electrocuted by static electricity that can collect in the airframe and discharge through a person into the ground. The position in the helicopter is hazardous because of possible power failure and uncertain conditions which could result if the load were suddenly lost.

11. Sling-suspended transfers:

The Special Assistance Team (SAT) concept was developed at the Naval Ship Missile Systems Engineering Station, Port Hueneme, to meet the need for engineering and technical assistance to Ship Missile Systems ships. The specific nature of duties of SAT members involves any emergency unplanned action required to restore a missile weapon system to an operational status. In the performance of his or her duties, the SAT member is exposed to hazards when he or she is transferred between the ships. There is also present the hazard of possible failure of the transfer equipment which would endanger the life of the team member being transported.

12. Cargo handling during lightering operations:

When there is no deep water harbor for supply ships to enter and unload their cargo, offloading of cargo and supplies from surface ships is accomplished by a lightering operation.

a. Landing Craft-Medium (LCM) boats are used in the operation, shuttling cargo between the shallow water harbor and the surface cargo ships.

- b. Loading an LCM involves swinging loads of cargo clear of the ship and lowering these loads from a height of 50 to 60 feet into the LCM boats. Loads at Wake Island usually weigh several tons and may consist of loose cargo in nets, cargo stacked on forklift pallets, containerized cargo, heavy equipment, large steel plates, etc. Each load, as it is swung clear of the ship, is virtually directly over the heads of employees in the LCM. During the time the loads are swung clear of the ship and are being lowered into the LCM, employees in the boat are subject to being crushed by falling cargo. Because of its small size, the LCM cannot avoid the falling cargo danger zone. In order to release the cargo sling or rig, or disentangle cargo nets, cargo handlers must move among the cargo in the LCM and along the sides of the LCM. During this time they are subject to being crushed by cargo shifting in the LCM, to falling into the sea between the LCM and the ship, being crushed, and to being hit by the pendulum-like movement of heavy cargo hooks.

Chapter 3 - TIMEKEEPING REPORTING REQUIREMENTS

- A. The following guidance, extracted from FAA Order 2730.8, Subject: Time and Attendance - Uniform Payroll System, is provided as a guide for properly reporting exposures described in Chapter 1 of this Instruction. The first line supervisor shall report and certify exposures:

1. Hazard pay - GS employees.

The Type (TY) code and percentage rate must be entered for GS employees under the Hazard/Environmental Column of the Time and Attendance Report, FAA Form 2730-68 (see Figure 3-1). There is one type of payment of hazard pay to GS employees. (See paragraph 8 of this Instruction.) The category codes are recorded in the TY column. Enter the percentage rate in the Rate % column. Enter the Start/Stop times that employee is actually involved in a hazardous working condition.

2. Supervisor's statement for hazard pay.

An employee claiming hazard pay differential shall provide information about the nature of the physical hardship or hazard and time of its performance to his or her supervisor. The supervisor must indicate in the remarks section that payment is in accordance with Chapter 1 and the type of duty. The reverse side of the Time and Attendance (T&A) Report may be used if needed. The supervisor may submit a separate memorandum for hazard duty pay if the approval is not in the T&A report.

3. Hazard duty pay - Entitlement on basis of hours in pay status.

An employee who performs a duty listed in Chapter 1 receives differential for the total hours in a pay status on the calendar day of exposure (See Paragraph A 1 for reporting).

4. General.

Hours of work performed during a continuous period extending into the second day will be reported on the T&A report on the day on which the work began, in which case the employee is entitled to hazard pay for all hours in a pay status on the calendar day in which the work began plus the hours of the continuous period extending beyond midnight.

5. Differential pay during absence on leave. When an employee performs a duty for which a hazardous differential is based on all hours in a pay status, he or she receives the differential for all hours worked in the day of exposure. For example, an employee who performs a duty listed in Chapter 1 for one hour and is on paid leave status for seven hours receives differential pay for eight hours.

COMDTINST 12550.11

TIME AND ATTENDANCE REPORT